

BSI Net Zero Barometer 2026:

Energy

The 2030 sprint and the national security mandate

Sector perspectives on progress, priorities and trade-offs across the UK economy.



Accelerating the 2030 clean power sprint, de-risking grid investments, and navigating ongoing circularity challenges clean power sprint

Introduction

As BSI's Net Zero Barometer enters its sixth year of tracking business attitudes and progress towards net zero, one thing remains clear. There's simply no net zero without clean energy. The sector serves as the foundation upon which every other industry's decarbonization journey is built.

But while most sectors are working towards 2050, energy is focused on a 2030 goal. The government's Clean Power 2030 mandate has replaced long-range planning, and is backed by consistent policy and major investment.

The transition here is legally mandated rather than market-led, which gives the sector a head start. But it's also creating pressure, as operators reinforce the grid at pace while keeping bills affordable.

This year's findings show what that looks like in practice.

Confidence in emissions data is among the highest of any sector surveyed, and no sector is more convinced that preparing for climate change protects business and builds resilience.

Yet targets are being recalibrated, and siloed data and end-of-life assets remain unresolved. The mood is positive, but major challenges remain on the final sprint to 2030.



Abbey Dorian
Head of Energy, BSI

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Ultimately, this is critical national infrastructure. If we hit record levels of clean power but suffer a major blackout, nobody will remember the carbon intensity that day. They'll remember the lights going out. Performance and resilience have to be delivered in parallel to sustainability.

This report draws on research conducted for the 2026 BSI Net Zero Barometer, providing a sectorspecific analysis of the opportunities, challenges and priorities facing the UK energy sector on the path to net zero. A full report covering and comparing in detail multiple sectors and their progress to net zero is available [here](#).



Sector snapshot: Where are we now?

The UK energy sector is a global front-runner when it comes to incentivizing decarbonization and sustainability. Roughly £30 billion is committed annually through to 2030 to build out clean power, and domestic policy commitment remains consistent.

However, the conversation within the industry has fundamentally shifted away from the broad ambition of net zero by 2050. Now, focus is on the government's national mission: Clean Power 2030. This targets at least 95% electrification from clean sources, with a 5% natural gas allowance for periods of catastrophic grid instability.

As the sector acts as critical national infrastructure, it operates under a distinctive regulatory framework. The net zero transition is legally mandated by statute, with government setting the policy direction and Office of Gas and Electricity Markets (Ofgem) enforcing and enabling the transition through strict licensing conditions and price controls. This framework, coupled with market mechanisms like Contracts for Difference (CfDs), compels major utilities and network operators to invest heavily in decarbonization as a condition of operation. Effectively, this gives the sector a 20-year head-start on many other industries.

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It's the last 5% of decarbonization that is the hardest. Getting to 50% or 80% clean power is comparatively straightforward; getting from 95% to 100% is exceptionally challenging.

Abbey Dorian
Head of Energy, BSI



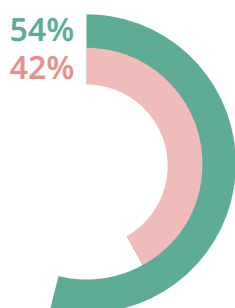
The data picture



Energy businesses surveyed

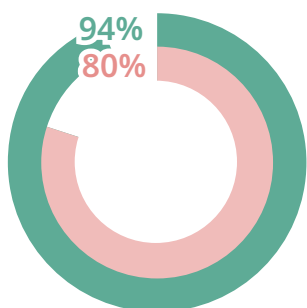


Average across all sectors surveyed



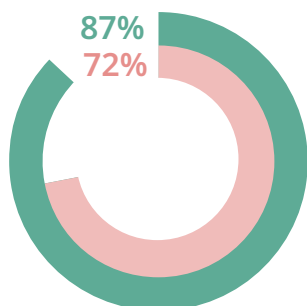
High commitment, but evidence of boardroom friction

While **54%** of firms surveyed are “very committed” to net zero (compared to **42%** across all sectors), execution is causing friction. **32%** cite a lack of senior management buy-in as an active barrier. This might reflect a structural tension between long-term sustainability targets and the operational pressures of strict price caps.



Driven by long-term resilience

94% of energy firms surveyed are concerned about future costs. They recognize that preparing for climate change is vital for their future business resilience. This is the highest of any sector surveyed, versus the average of **80%** measured across all sectors in the survey.



Protecting prior investments

87% believe reducing net zero efforts now will risk losing prior investments and increasing future costs, exceeding the average of **72%** across all sectors. This is a clear driver of momentum.



96%

77%

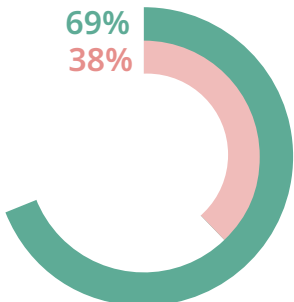


89%

72%

Highest levels of data confidence

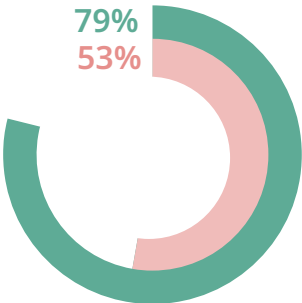
Alongside AI & IT and pharma, the energy sector has the highest confidence in both its own emissions data (**96%** vs. a **77%** average across sectors) and that of its supply chain (**89%** vs. **72%**). Accuracy is driven by strict regulatory licensing mandates and the ongoing transition to standardized, machine-readable data systems like the Ofgem-mandated Common Information Model.



69%
38%

Target recalibration

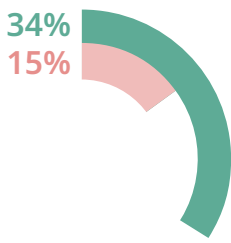
69% of energy firms surveyed have extended, paused, or dropped their net zero targets. This is well over the average proportion of **38%**. This might well reflect the sector's exposure to volatile global politics, supply-chain risks and practical domestic bottlenecks.



79%
53%

The communications pivot

79% admit to changing how they communicate climate action due to rising climate scepticism (much higher than the average measured across all sectors of **53%**). This reflects the volatility described above.



34%
15%

Internal pressure to act

Staff pressure is a uniquely high driver for net zero action in energy (**34%**), second only to cost savings and operational efficiencies. This is more than double the total proportion of **15%** overall.



Key barriers & pressures

Despite being a front-runner, the sector faces distinct and complex hurdles that threaten to slow momentum:

! **The data bottleneck:** Ambition for a decentralized, digitalized grid is being restricted by outdated data capture and sharing practices. To plan effectively, operators need an accurate picture of where to reinforce the grid and connect new projects. Ofgem mandated networks to transition the Long-Term Development Statement from a document-based statement to a machine-readable grid model based on the Common Information Model in 2025. The aim is to have network data that is discoverable, comparable and trusted, supporting connection, investment, flexibility and planning decisions. Implementation across distribution networks and software vendors has been far more time intensive and complex than initially anticipated.

! **The circularity straitjacket:** As first-generation renewable assets (particularly wind turbines) come offline in 5 to 10 years, this poses a massive recycling challenge. Without clear guidance on the transfer of legal liability, usable materials cannot be repurposed safely or economically. Perfectly good components are sent to landfill. Hesitancy to disclose this waste and suffer reputational damage has created a data void slowing investment in circular supply chains.

! **Geopolitical vulnerability:** Without significant domestic critical mineral reserves, the UK relies heavily on global supply chains, concentrated in China, for the components and products essential for our energy sector, from solar photovoltaic systems to wind turbines. So, the UK remains highly exposed to geopolitical tensions and its influence on global investment flows. This makes UK energy firms hyper-sensitive to geopolitics. It might be why 69% of energy firms surveyed have recently recalibrated or extended their net zero timelines.

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We have grand ambitions for a decarbonized, digitalized grid, but we are relying on outdated data and an incomplete picture of what the UK needs.

Abbey Dorian,
Head of Energy, BSI



Drivers and opportunities for progress

✓ **National security and technical viability:** The ultimate driver for the level of pace and innovation in the energy sector is not solely environmental ambition, but the need to keep the lights on while the UK navigates an unstable global situation and unprecedented growth and complexity in energy assets.

✓ **Decentralization at the grid edge:** Immediate opportunities lie in distributed energy resources. If more consumers use plug-in solar, electric vehicles, and residential batteries they will become active grid participants and can reap the financial rewards for participating directly in the clean power mission. This shifts the UK from traditional centralized power generation toward a modern, decentralized network.



Looking ahead: The next 12-24 months

The energy sector is entering a dash to reach the 2030 clean power target. Whilst achieving 90-95% clean power is deemed feasible with unprecedented levels of investment, 100% is viewed more sceptically.

The final sprint to 2030 will be defined by ruthless pragmatism to guarantee both decarbonization and unwavering national energy security.

So, the next two years will see a recalibration of technology backing. Government risk appetite may shrink, favouring proven, established technologies. Fledgling technologies (such as geothermal energy, or broad applications of hydrogen) not proven at scale by mid-2027 may well lose financial backing. Hydrogen is a good example of this strategic investment switching gears, with the focus pivoting strictly to heavy transport.

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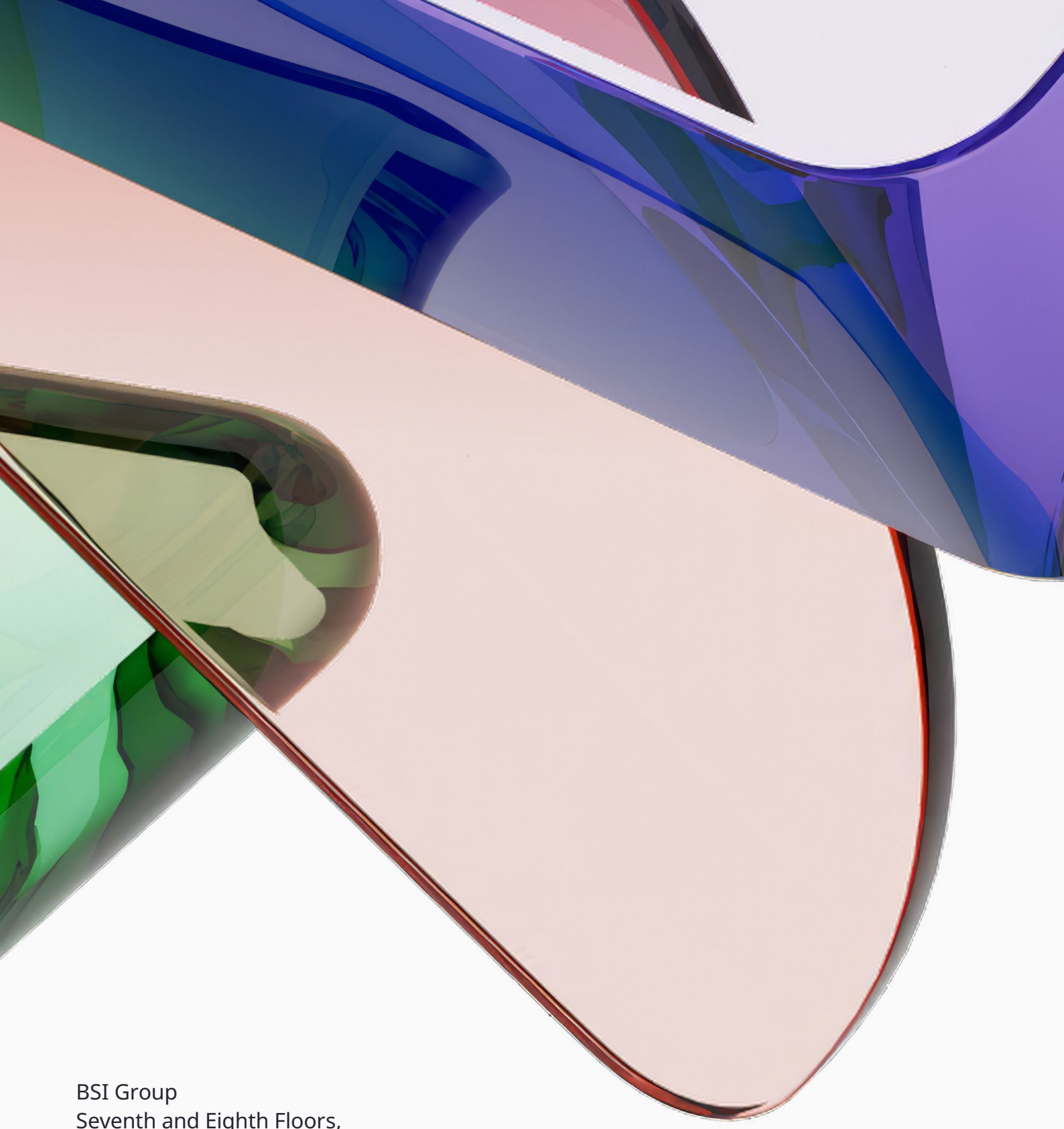
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Key standards for net zero in the energy sector

Search by standard title on [BSI Knowledge](#) for more details.

Stay up to date with the latest developments in energy standards [here](#).

Standard	What it does
 The ISO Net Zero Standard - ISO 14060	This will be the first internationally agreed, independently verified standard for net zero transition planning. Created to help organizations move from ambition to credible action. The ISO net zero standard will provide a universal baseline for what “good looks like” when it comes to taking net zero action as an organization. It tackles the fragmented net zero governance landscape by converging global best practice in one place. The standard is based on the foundational ISO Net Zero Guidelines, which provide a common reference for understanding and planning for net zero for organizations across all sectors, sizes, and jurisdictions. Read more about the standard here.
 Common Information Model standards	Energy-system digitalization and interoperable exchange of grid and asset data. Read more here.
 BS EN 61400 – Wind turbines	A multi-part series covering the design, safety, testing and performance of wind energy systems. It supports the full turbine lifecycle, from site assessment and component testing to assembly and operation, providing a common technical basis for assessing performance, supporting certification and enabling projects to be financed and built. Read more about the series here.
 PAS 1878:2026 – Energy smart appliances. System functionality and architecture. Specification	The specification provides a common technical framework for smart appliances such as heat pumps, EV chargers and batteries to respond to electricity demand. It supports secure communication and interoperability between devices, platforms and energy services, helping households use energy more efficiently while supporting a flexible, lower-carbon energy system. Read more about the standard here.
 BS EN ISO 50001:2018+A1:2024 – Energy management systems. Requirements with guidance for use	The standard offers a framework for organizations to manage energy, improve energy performance and reduce costs. It helps organizations establish objectives, identify improvements and track progress through continual improvement. Applicable to organizations of any size or type, it can also integrate with management systems such as ISO 9001 and ISO 14001. Read more about the standard here.
 Standards programmes for CCUS, hydrogen, batteries, critical minerals and climateresilient energy infrastructure	Supporting the development and deployment of low-carbon energy technologies and infrastructure.



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